

November 21, 2000

**Mecklenburg County
Engineering & Building Standards Department**

Presentation to the Building Development Commission

**Proposed Revisions to the
Commercial Permitting Process**

**Mecklenburg County
Engineering & Building Standards Department
Presentation to AIA-C Board of Directors**

Index

Critical Initiatives

Gatekeeper Proposal.....	Page 3
Designer as Point of Contact	
Re-Review Fee Proposal	Page 4
A/E Performance Goals	

Other Initiatives

Summary of Commercial Initiatives	Page 8
Approved as Noted Criteria.....	Page 12
Plan Review Markup Criteria.....	Page 14
Commercial Master Plan Program	Page 16
Priority Review for A/E's	Page 17
Revised Review Priorities	Page 21
Quarterly Plan Review Defect Report (Sample).....	Page 22
Plan Review Required Summary	Page 24

Proposal for Gatekeeper Positions

Draft Outline

1. Background

The Commercial Plan Review/Permitting Team began working in July on the initiatives submitted by the Plan Review Task Force. As it progressed, the Team identified keeping incomplete plans out of the system as a key response to the PRTF challenge of reducing time required to enter projects into the system. Incomplete plans obviously create lost time for the facilitators, but perhaps more critically use plan reviewers' time very poorly. There is no hard data, but we anticipate incomplete plans are also a big contributor to the 79% first review failure rate in Commercial Permits.

A sub committee was appointed to research how other authorities attack this problem. Information was collected from Houston, Phoenix and Jacksonville. In addition, we talked to the City of Raleigh about why they are returning to a gatekeeper position after abandoning it (in favor of their new re-review fee) a year ago. A draft proposal was developed, then revised as an amended proposal which was accepted by the Commercial Plan Review/Permitting Team on September 21. All present agreed that concept should be advanced to reality as soon as possible.

2. Program Description

- The Commercial Permits counter will be split in two: an intake counter and a plan pickup counter.
- Two new positions will be assigned to the intake counter. They will be hired with a strength in reading and working with construction documents, specifically plans.
- The specific charge of these new positions will be to turn away any plans that are not complete and ready for review. The primary criteria used will be Plan Submittal Requirements for Commercial Projects.
- On re-submittals, the gatekeepers will verify all items identified on the plan reviewer's comment sheet from the previous review are addressed prior to re-submittal (this is part of the new e-mail comment system). Again, incomplete work will be rejected.
- The gatekeeper position will receive technical backup from existing CTAC positions, in cases where they are not sure if drawing info is sufficient.
- Projects will still be entered into the system by the Commercial facilitators, with the exception of CFD/MCFM sole submittals or re-submittals. In this case the gatekeepers will enter the projects and use a special bin system to distribute and keep track of drawings and issue the permits.
- We do not anticipate rotating the gatekeeper positions among all the Commercial facilitators.

3. Program Schedule

The program is currently being piloted with a temporary reassignment. Full initiation of the program will require adding two positions. We would like to advertise and fill these positions immediately upon approval by the Board of County Commissioners.

Proposal for Initiation of Re-Review Fees On Projects with More Than Two Plan Reviews

Draft Outline

1. Background

The Plan Review Task Force submitted its final report to the Building-Development Commission on June 14, 2000. The report outlines several initiatives designed to elevate first and second review success rates as well as compressing the average time between first review and permit issuance. The initiatives included a recommendation to provide a re-review fee for projects, which require more than two reviews.

The April 14, 1999 Commercial Plan Review Turnaround Study to the Building Development Commission noted that 38% of all projects require more than two reviews. Rarely is there a good reason for a project to merit this extra allocation of resources. Projects necessitating third, fourth or more reviews abuse the permitting system and should be addressed. Consequently, the Task Force recommended implementing a system of added plan review charges focusing on this problem.

2. Program Description

The concept is very simple. Building Permit fees include a built in cost for two reviews. When projects exceed this level of service, they use plan review resources in excess of the fee structure. Some adjustment is appropriate in this case, as well as in the case of whole sheets re-issued after the first review is complete. In brief, the program would work as follows.

- Any project would be allowed two reviews within the basic permit fee structure.
 - ◆ Exception 1: Sheets revised in total after the first review, or re-issued would be subject to a re-review fee as described in Part 3.
 - ◆ Exception 2: Revisions to approved plans after the permit is issued.
 - ◆ *(See Note 1 on Building Development Commission 11/19/00 final motion for additional exceptions.)*
- Any project exceeding two reviews would be subject to re-review fee as described in Part 3.
- Work will be performed on an hourly basis and payment made as described in Part 3.
- An appeal process will be available to professionals or other customers who believe plan review turndowns were not justified.

3. Proposed Re-Review Fee

A Re-Review Fee of \$100 per trade hour will be charged on any project for each plan review beyond the second review. The Re-Review Fee would be in addition to any permit fee, fast track fee, CFD fee, or other base permit charge. The Re-Review Fee will be paid by the Lead Project Designer prior to permit issuance.

Upon re-submittal for the third or subsequent review, the Department may check the plans to determine the required scope of the review and at its discretion, require a deposit from the Lead Project Designer based on the estimated hours for the subsequent review. Final cost of the re-review will be calculated based on the actual hours expended, with any difference being charged or credited to the Lead Project Designer accordingly.

In a parallel effort to assure all customers pay fully for permitting system costs they incur, the Department proposes to begin exercising collection of 25% of the Building Permit Fee on permit application, as prescribed in the current ordinance. This will aid the Department in addressing two problems:

- a) A growing number of projects abandoned after execution of reviews.
- b) The anticipated abandonment of some permit applications, caused by the proposed re-review fee.

(See Note 2 on Building Development Commission 12/19/00 final motion for modifications to above.)

Definition: Where the term “Lead Project Designer” is used, it refers to the following.

- a) The seal holding architect on a project shall be responsible for all disciplines re-reviews required, and any related re-review fees.
- b) If the project has no architect, the seal holding engineer with the greatest construction cost shall be responsible for all disciplines re-reviews required, and any related re-review fees.

If a project has no architect or engineer, the Owners’ contractor shall be responsible for all discipline re-reviews required and any related re-review fees.

4. Appeals

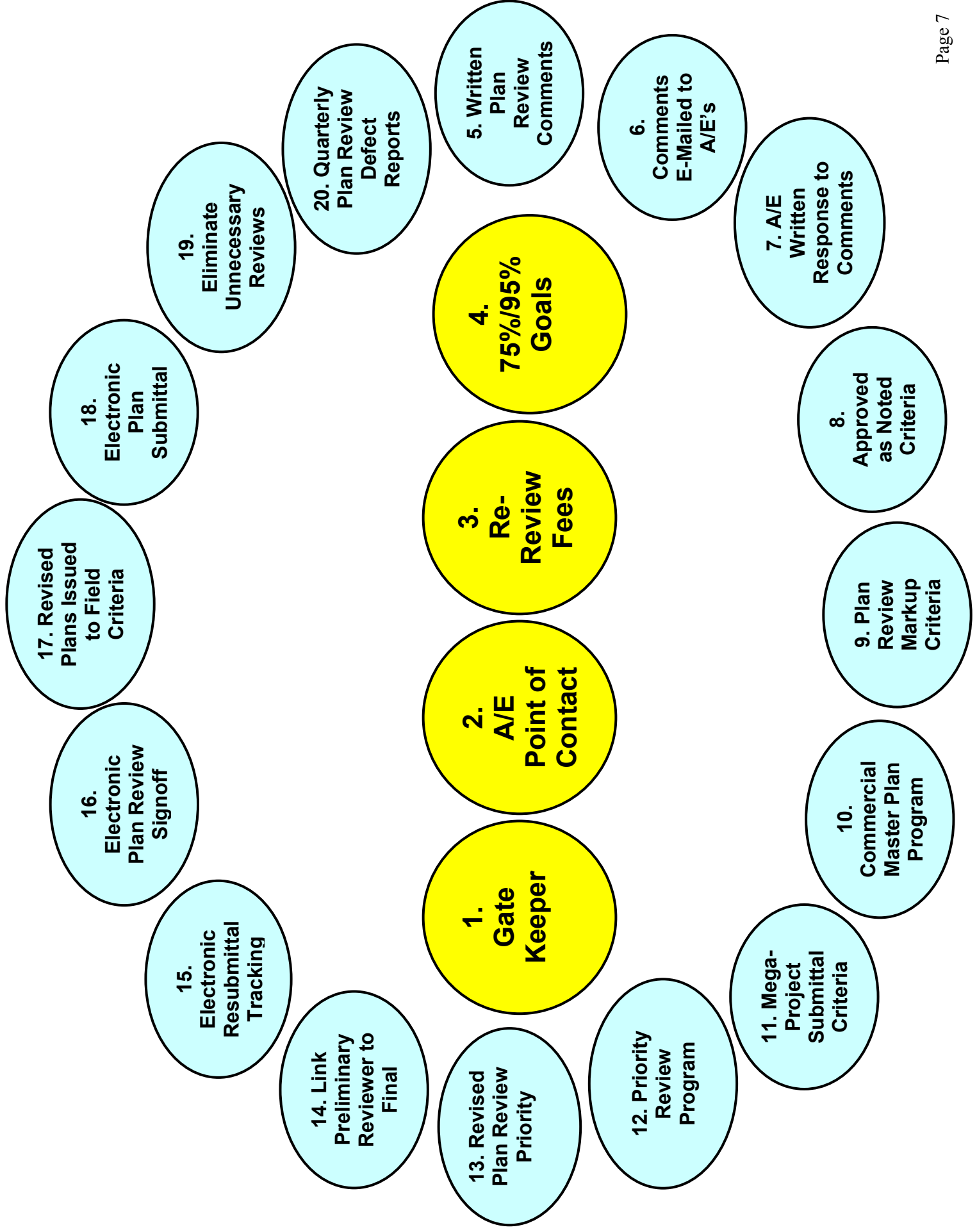
Recognizing that disagreements occur on code interpretations and these may impact a project’s re-review fee status, the Department proposes a simple appeal process. Appeals will be directed to the Commercial Permits Core Process Manager who, when necessary, will consult the trade chief of the issue or discipline in question. Appeals may only be submitted in writing, with all relevant information provided. Appeals must be submitted within ten (10) working days of the rejection date. An appeal decision will be made within ten (10) working days of receiving the written appeal.

5. Program Schedule

We tentatively plan to initiate the Re-Review Fee Program within 60 days of approval by the Board of County Commissioners.

Note 1: In the Building Development Commission November 21 meeting, the following motion was supported: “Motion to recommend to the Board of County Commissioners that the Re-Review Fee Program described in the October 25, 2000 outline be implemented at the earliest opportunity, and further, that the Building Development Fee Ordinance be revised to include a Re-Review Fee of \$100 per trade hour with the conditions described in the outline with the following amendment – where a formal preliminary review, as defined by Engineering & Building Standards, has been executed before the permit application, the re-review fee on the third review shall be waived.” The department supports this motion.

Note 2: *In the Building Development Commission December 19 meeting, the following motion was supported: “The Building Development Commission supports the Department proposal to initiate a 25% partial payment of permit fees at the time of permit application, including the establishment of a per project minimum fee of \$150 and a maximum fee of \$10,000. Further the Department shall word the fee ordinance change to allow the payment of the 25% fee by the Owner, his agent, or as an alternate, payment may be secured by the bond posted by the General Contractor on the project, with that contractor’s permission. The industry will be given sixty (60) days notice prior to the implementation of this policy change, during which time the Department and BDC will work together to advise the community of the change.” The department supports this motion.*



Summary of Commercial Plan Review Process Initiatives

1. Gatekeeper Proposal

Splits Commercial Permits counter in two, submittal and pickup.

- See separate program description attached
- Timetable: March, 2001

2. Designer as Point of Contact

Currently, the point of contact during plan review is the permit applicant, more often than not, the contractor rather than the A&E's on a project. This creates problems in communicating plan review comments, as they all go through the applicant. Consequently, the A&E's receive their plan review comments second hand, if at all.

The Task Force believes all would benefit if the designer of record served the role of point of contact on all permit applications. All B/M/E/P FP/Z comments would circulate to the design team, through the designer of record, who would be responsible for coordinating all changes and re-submittals. The only exception suggested is on projects with no architect or engineer, the contractor would be allowed to assume the point of contact role if the owner so designates.

- Timetable: January, 2001

3. Re-Review Fee Proposal

Implements a new fee structure for projects requiring 3 or more reviews.

- See separate program description attached
- Timetable: March, 2001

4. A/E Performance Goals

The Task Force believes the A and E professions should adopt voluntary performance goals for their membership at large: 75% plan review success rate for first reviews; 95% plan review success rate for second reviews. A&E's will be measured in the future on their ability to respond to this challenge

- Timetable: immediate

5. Written Plan Review Comments

Other authorities have used plan review comments in text form effectively. Switching to written comments assures positive communication of comments to A&E's, as well as their response on an item by item basis.

- Timetable: January, 2001, or successful completion of the current pilot

6. Plan Review Comments E-mailed to A & E's

Currently, all plan review comments are communicated en masse, on the completion of a review sequence (when all trade reviews are complete). This makes for a slow communication process, with some discipline comments in limbo for many days. The Task Force proposes an electronic tool be placed in service which will make plan review comments immediately available to the project's architect or engineer. This would allow A&E's to get an early start on corrections, or contact the plan reviewer on misunderstood information. The Department is currently testing an E-mail pilot.

- Timetable: January, 2001, or successful completion of the current pilot

7. Required A/E Response to Comments

A common generator of third and fourth reviews is failure by the design team to address all comments made by plan review staff. Development of a tool requiring professionals to positively answer all comments, would undoubtedly raise second review pass rates significantly. To that end, the Task Force recommends two new re-submittal requirements.

- a) A&E's should bubble all changes responding to E&BS comments
- b) A&E's should provide a summary written response to E&BS indicating where and how the each plan review comment was addressed.

The current E-mail pilot includes a test of the A/E response tool as well.

- Timetable: January, 2001

8. Approved as Noted Criteria

Professionals periodically note plan review comments are so simple as to allow approval with a conditional note. While this is complicated by the fact not all disciplines have simple comments at the same time, the Task Force spent a considerable amount of time receiving suggestions for and shaping criteria for use of "approved as noted" by staff in the review process.

- The proposed "approved as noted" criteria is included in this report.
- Timetable: immediate

9. Plan Review Markup Criteria

Clarity in plan review comments is critical to a successful re-submission; if A&E's clearly understand the code issues in question, their ability to correctly address them is significantly enhanced. The Task Force spent a considerable amount of time receiving suggestions for and shaping criteria for how to effect the best set of plan review comments, thus optimizing communication between CEO's and A&E's.

- The proposed Plan Review Markup Criteria is included in this report.
- Timetable: immediate

10. Commercial Master Plan Program

This tool has been very successful in the Residential Drawing Submittal Program and there is reason to believe it may be of use in Commercial Permits. While the exact demand is unknown, the best approach is most likely to put a Commercial Master Plan Program in place, advertise it and see if there is sufficient demand to justify the record system. A pilot is currently underway.

- See separate program description attached
- Timetable: Pilot in Fall, 2000; full program in January, 2001

11. Mega-Project Submittal Criteria

Extremely large projects, or mega-projects will be more successful in the review process if certain criteria is adhered to, including review entry and exit meeting. This approach was used quite successfully in a recent large modified express review.

- Timetable: January 1, 2001

12. Professional Priority Review Program

The Task Force advocated having two separate tracks for plan review, one being a “priority lane”. The “priority lane” would have plan review response time goals more aggressive than regular review tracks. Entry to the priority lane would be limited to design teams who consistently maintain a high plan approval rate.

- See separate program description attached
- Timetable: April, 2000

13. Revised Plan Review Priority List

Project designers requiring many re-reviews are clearly not so concerned about their schedule so as to thoroughly address plan review comments. In turn, these projects should be a lower priority in the permitting process.

Recommendation: For projects which fail the second review; lower the priority on the next re-review (third or later review). These projects should be sent to the back of the line where the response time goal is 15 days or more, in contrast to the normal five (5) day response time goal for re-reviews. This will free up resources for other projects, while at the same time serving as a disincentive with respect to poor construction documents.

- See attached review priority summary chart
- Timetable: January 1, 2001

14. Link Preliminary Reviewer to Final Review

One of the most effective tools to improve plan review success rate is preliminary code reviews. To optimize the benefit of this process, we must assure that the final plan reviewer is the same as the preliminary reviewer. Two basic steps are required here:

- Owner’s team advises of preliminary reviewer name at the time of permit application
- E&BS makes the same assignment for the final review

E&BS will create an electronic assignment tool to assure these assignments are followed through. A & E’s will be required to submit preliminary review meeting notes to the preliminary reviewer.

- Timetable: January, 2001

15. Electronic Re-submittal Tracking

Tracking of re-submittals is an Achilles Heal of the current permitting process. Commercial Permits will create an electronic tracking program for re-submittals to keep these projects from falling through the cracks. The program will flag any re-submitted projects, which have been in the system longer than the assigned workday goal.

- Timetable: April, 2001

16. Electronic Plan Review Signoff

Current signoff procedures are manual, time consuming and extremely paper heavy. Re-submittals create an additional problem, with various generations of the same sheet gaining separate approvals.

The new procedure will maintain an electronic log of document content by sheet, sheet date and revision date (submitted by the A&E's). Plan reviewers will sign off electronically on this log, rather than the actual sheet. At permit issuance, the sign off log will be attached to the permit drawings as a permanent record.

- Timetable: April, 2001

17. Revised Plans Issued to Field Policy

Plans are currently issued to the field in a confusing mix of revised sheets, sometimes with several different generations for the same sheet. Implementation of written plan review comments (item 5) and electronic plan review signoff (item 16) will allow the approval of construction documents with no duplicate sheets. In connection with this, A&E's will be required to insert revised sheets in their plans for re-submittal

- Timetable: April, 2001

18. Electronic Plan Submittal

The Task Force identified the need for Electronic Plan Submittal as inevitable, noting that manual drawing submission should also be allowed to continue. A pilot EPS program is currently underway to identify advantages and disadvantages of such a system, allowing both the Department and professional community to plan accordingly.

- Timetable: January, 2001, or successful completion of the current pilot

19. Eliminate Unnecessary Reviews

The Task Force requested and the Department has performed an evaluation of plan review scope. This included identifying which reviews must be done to produce a high level of life safety and support field inspections. A large number of plan reviews, including selected subcontractor work and selected small projects, were identified as unnecessary and have been eliminated.

- The new Plan Review Required Summary is attached
- Timetable: immediate

20. Quarterly Plan Review Defect Reports

Dissemination of plan review defect data is key to focusing on where the various disciplines have trouble understanding the building code or local ordinances and, in the long term, driving plan review success rate up. This data will allow both the professional associations and individual offices to address the weak areas in their knowledge of the building code. Consequently, the Task Force recommended, and E&BS is moving forward with developing a summary report of plan review defects noted by discipline (building, mechanical, electrical, plumbing, fire protection and zoning), for posting on the Internet.

- A sample of the Plan Review Defect Summary Report is attached
- Timetable: April, 2000

Approved As Noted Criteria

In the interest of promoting the use of “Approved as Noted” as a tool to expedite plan reviews with few comments, the Plan Review Task Force recommends the following criteria.

Part I: General Criteria

- a) Litmus Test I:
 - Could you mark up the “approved as noted” items on both sets in 5 minutes or less?
- b) Litmus Test II:
 - Must be a minor simple stand alone item, not part of a large assembly (example: exit sign vs. rated wall)
 - Must be easily verifiable in the field, not covered up on the finish
 - Should be easily correctable in the field if missed (example: changing a door swing)
- c) If so, the plan reviewer should call, fax or e-mail the A and E advising of use of “approved as noted” option
 - Contact should indicate item, sheet number and code section
 - E&BS will assume ok to proceed, but A & E may decline “approved as noted”
- d) Architect or Engineer should fax or e-mail a return memo indicating message received and understood. Memo goes in file. Facilitator checks to be sure memo received before issuing permit.
- e) Where more than one discipline is involved in a project, “approved as noted” should only be used if there is a project architect in the lead, or the designated lead engineer.
 - Architect will be copied on any memos to the engineer
 - Architect will be responsible for coordination of code compliance issues in all other disciplines, raised by the “approved as noted” item.
- f) All plan reviewers, as a group, should strive to use this criteria in a consistent and uniform manner.

Part II: Examples of revisions, which benefit from use of “Approved as Noted” if they are the only outstanding comment

IIA. Building Review Examples

- Tempered glass required
- Lever locks required
- Mislabeled doors
- Revising a door swing
- Horn strobes missing
- Adding an exit light
- Clarification of material details
- Adjustment of detail dimensions (handrail heights, etc)

IIB. MEP-FP Review Examples

- Wire size (except for major equipment utilization)
- Exhaust fan (small)
- Manual pull stations
- Fire dampers
- Fire hydrant specification
- Fire Department pumper connection specification
- Missing sprinkler heads
- Additional fire strobe
- Trap on floor drain
- Vent stack size: Noted for minimum or no fixture call required
- Floor drain clean out
- Hi-low drinking fountain: Based on reference to ADAAG detail

Part III: Examples of items which should not be eligible for use of “Approved as Noted”

- Nothing changing the design (impacting partition or space layout)
- Ramps vs. steps
- Wall ratings

Plan Review Markup Criteria

In the interest of creating consistency among all reviewers in their approach to reviewing plans, the Plan Review Task Force recommends the following steps be adopted as performance criteria for plan review staff, on either a voluntary or required basis.

Part I: General Criteria

1. There are four items you should have prior to reviewing any plan.
 - a) Check sheet(s), b) the plans, c) the folder, and d) The specifications (if provided); each is an integral part of the review.
 - To avoid projects turned down because the reviewer does not see letters in folders and specifications, gathering all the project information is vital.
2. The plan checksheet content should be an outline of the most important sections of the code with some space left to handle any special circumstances the occupancy presents.
 - If forms don't reflect the vital code sections, they should be revised accordingly.
3. The typed name and phone number of the reviewer should be checked on every checksheet so the designer can readily identify the reviewer to contact them with questions about the project.
4. All of the approved/disapproved boxes on the checksheet should be filled in and identified as to the reviewer's intention on that particular code item.
 - The symbols for approval, disapproval and not applicable should appear on the check sheet.
5. The sheet number of each plan that is turned down for a particular code item with red lined comments should be added to the box on the check sheet with that designated code article.
 - The designer can then readily identify which particular code article is in question at which location.
6. Include any notes that may be needed to clarify any of the items you have turned down, however, most of the notes should be on the plans.
7. Review the plan folder.
 - Their may be a letter from the engineer, a job narrative of special occupancy issues, letters on the job pre-review assumptions and problem resolutions, Department of Insurance letters, information from outside agencies (such as DFS or Health), and finally the permit application itself which contains utility information for plumbing and electrical
 - The comments of other reviewers should be scanned to see if their comments could impact your review.

8. If the specifications are missing from the plan and the plan cover sheet does not say “spec” then a call to the designer will prevent undue delay in the project. The Architect is usually prompt in responding to your request for specifications. (Specifications will be required by the Gatekeeper.)

Part II: Review Criteria

1. Quickly go through the entire set of plans starting with the Appendix “B”, the site plan, and the ASPMEF, to get a feel for the overall design of the job.
 - Look for quick discoveries about the coordination of the plans and identify any problems that need to be resolved by you or another trade reviewer before a plan can be approved.
2. Be sure to inform other reviewers, either by note on the front of the plan, (for reviewers who have not yet reviewed the plan), or direct contact with reviewers who have completed the review and missed a potential code problem during their review.
3. During the project review, be sure to make clear and concise comments on the plans with identifying code articles noted where applicable.
4. Provide attachments for clarity.
 - Some examples of attachments for M/P plans include the kitchen hood, roof drain and scupper calculations for rainfall in the Charlotte area, refrigeration (type, quantity, calculations, and alarms), and oil/water and grease interceptor requirements unique to Mecklenburg County.
5. In the case where an Architect or Engineer may put A/M/P/E on the same plan sheet, reviewers should put the letter of the trade they review above each comment they make to avoid confusion for the designer and the reviewer on calls from the designer.
6. Try to resolve code conflicts before they escalate.
 - get advice on the problem from all available sources before you contact the designer; this may include other reviewers, the trade Chiefs, and DOI.
 - Always give the designer the number of others that you may defer to for an alternate decision.
7. Return the designer’s calls as soon as you can.
 - Always leave a message that you returned the call with clerical personnel or voice mail if the designer is not in.
 - If the designers question can be answered on voice mail without playing “phone tag”, use this option.
 - Try to fax the designer any information “within reason” that will clarify a code conflict.

Commercial Permits

Master Plan Review Program

Pilot Draft Outline

General Description

The Commercial Master Plan Review System is a spin off of the highly successful Residential Drawing Submittal Master Plan component. As such, it is designed to free the commercial project customer, who builds the same project plan more than once, from having that set of plans fully reviewed each time the same project is built. These repetitive plans are sometimes referred to as prototypical projects.

Our current thinking on how this tool may operate in Commercial permits is as follows.

- The first time the commercial project is built, that set of plans will have the standard plan review using the Commercial Permits Plan Review Markup Criteria.
- Upon application, the customer will be asked if they wish to set this project up as a Commercial Master Plan. In addition, the customer may indicate if there are any standard alternates they wish to have reviewed.
 - *Customers have two options: 1) list all alternates up front, or 2) amend the master plan later.*
- All revisions requested by plan review staff will be incorporated in the final approved drawings.
- Once approved, the documents will be stamped and given to the applicant, along with a Plan Identification Number (PIN), assigned to the plans.
 - a) This PIN will be *year dated* and identify the plans for retrieval at the next permit application.
 - b) *CMP stamp will be applied to the lead architectural sheet, identifying in large, bold type "COMMERCIAL MASTER PLAN PROGRAM, PIN xxx-01"*
 - c) *An index of CPM sheets would be included on the lead architectural sheet*
- Retrieval of the original approved plans will be required, since there will not be a full plan review required the next time those plans are submitted. Instead, subsequent projects will only be reviewed for changes declared by the applicant and modifications to fit the prototype to a new site.
 - *A dedicated CPM storage area will be set aside in Document Control*
- *CMR projects may be created off previously approved plans, provided the plans had no red marks and were reviewed on the current 1999 NCSBC.*
- On subsequent projects, the applicant must indicate this is a Commercial Master Plan submittal, including the assigned PIN number.
- NC Architecture and Engineer Licensing Board Rules on sealing of prototypical projects will be strictly adhered to.

Time Frame for Approvals of Plans

Currently, the N.C. State Building Code is on a three-year revision schedule. Therefore, the plans approved on this program will remain approved for that three-year cycle. (The plans may need to go through the review process at the end of the 3-year cycle, when the code changes. This will be dependent on the extent of the actual changes to the code.)

Program Availability

Available to any commercial customer who intends to build an identical building plan (*either new construction, renovation or upfit*), more than once in the City of Charlotte, Mecklenburg County, and in the 6 towns in Mecklenburg County (Matthews, Mint Hill, Pineville, Huntersville, Cornelius, and Davidson). *Participation of CFD and City Engineering must be confirmed.*

Documents Required for Initial Master Plan Review

The initial Master Plan Review will require the same documents as any regular, commercial project plan review. Please note, to gain the maximum benefit in later project submittals, the plans submitted for review under this program should include all *known* options or alternates that will affect later submittals, including changes in square footage or structural loads.

When submitting for a building permit for a commercial project that has previously been approved under the Master Plan System, the applicant will need:

- The Site plan and other Zoning and addressing information as required for regular commercial plan review. (This part of the plan review is the same as any review.)
- Appropriate sheets describing any changes from the approved master plan drawings.
- A completed Master Plan Summary Sheet. (Including the PIN for the plan to be used.)
- A Charlotte/Mecklenburg Building Permit application.

Changes or Revisions

On the Master Plan Summary Sheet, the builder must identify any revisions from the original approved plans. Where there are any major revisions or changes from the plans that were originally approved on the Master Plan Review System review, those portions of the plans will go through a full commercial plan review.

Some examples of major revisions would include:

- Changes in loads and load bearing conditions.
- Changes to the square footage of the plan beyond the 10% limit.
- Changes in components, material types, and construction techniques.
- Changes in plan layout effecting means of egress
- Changes in floors or walls requiring rated construction.
- Changes in plan layout expanding the scope of accessibility requirements
- *CMP's may be issued on building shells, with subsequent review only of plan or fixture changes effecting lighting, mechanical, utilities or other code issues.*

The system will allow the applicant to make some minor revisions from the approved plans without going back through the plan review process. Some examples of allowable minor revisions would include:

- Increase in plan square footage, less than 10%, and not impacting allowable area or means of egress.
- Changes in finish schedule (flame spread and smoke development ratings remain the same)
- *Mirror images will be accepted off a base plan without requiring submittal of new drawings, except for foundation drawings, which if required, shall be drawn and submitted as built (not reverse).*

Where projects are permitted using the Commercial Master Plan Program, and subsequent field changes are found to adversely affect the Master Plan Approval, the Department has the discretion to instruct work to cease while a full plan review is conducted.

Streamlined Submittal Process

The end goal is to keep Commercial Master Plan Projects out of the conventional plan review system, or at the very least, give them a separate track. Consideration should be given to assigning CMP's to CTAC, both to facilitate review and issue permit.

- *A preliminary code review meeting at 80-90% completion will be required.*

Pilot

Land Development and Construction Regulation is currently seeking 3 project types to test the implementation of a Commercial Master Plan Program, including:

- prototypical schools
- at least two other project types

The pilot period will run from August 17, 2000 through December 17, 2000. In December, the Department will conduct a thorough review of CMP pilot program with participants, identifying benefits and problems. All appropriate revisions will be incorporated, with the goal of making the Commercial Master Plan Program available to all customers on January 1, 2001.

Interested parties should contact Bob Dulin (336-4363), *Patrick Granson (432-0081)* or Jim Bartl (336-3827).

Priority Review for Architects and Engineers with High Approval Rates

Draft Outline

1. General Description

The Plan Review Task Force submitted its final report to the Building Development Commission on June 14, 2000. The report outlines several initiatives designed to elevate first and second review success rates as well as compressing the average time between first review and permit issuance. The initiatives included a recommendation to provide a separate review track for Architects and Engineers who consistently submit plans in compliance with the N.C. State Building Code and local ordinances. Very simply, the idea is A&E's who take greater care in preparing their construction documents, subsequently achieving a higher plan review approval rate, merit a higher priority in the daily plan review schedule. This draft program describes how such a tool might work.

2. Program Description

In Winter, 2000-2001, the Land Development and Construction Regulation computer system new plan review-permitting module will be on line, with the ability to track plan review success rate by both the discipline and shop. A&E's will know how often they are successful in their review, when they fail, and why they failed.

Using this information, we propose establishing a priority review for Architects and Engineers with high plan review approval rates, as follows:

- All projects would be assigned to a lead architect or engineer.
- The lead A/E would be responsible for all reviews on the project, collecting both passed and failed reviews:
 - ◆ Typically, the lead entity would be the architect.
 - ◆ Where no architect is participating on the project, the lead engineer would be the party with the highest construction cost for their discipline.
- Quarterly reports would indicate each shop's pass/fail rate on reviews.
- A&E shops would have the option of assigned PIN numbers and reporting pass/fail rates by the individual PM/PA.
- A&E seal holders with plan review approval rates greater than or equal to 85% would merit priority reviews for the following quarter.
- Plan review turnaround time goals would be revised to the following:

<u>Project type</u>	<u>Small Project Goal</u>	<u>Large Project Goal</u>
Regular Reviews	5 work days	15 work days
Priority Reviews	3 work days	10 work days

- Given review time requirements, mega projects (high-rise, large assembly, etc.) would be excluded from this program. The new large project review team proposed other tools to expedite the initiation of such reviews.
- This program would be initiated along with a disincentive for A&E's requiring more than two reviews on their project. Such project would be relegated to submittal status (goals of 5/15) rather than re-review status in plan review priorities.

Comments on the foregoing program draft description should be directed to Jim Bartl or Kari Lanning, or you may bring comments to the next Commercial Plan Review-Permitting Team meeting for discussion.

Proposed Commercial Review Priorities

	A/E Priority	1 st Review	2 nd Review	3 rd Review	4 th Review
Small Project	3	5	5	10	15
Large Project	10	15	15	20	20

- Note 1: Above turnaround times are in work days
- Note 2: Excludes projects of 400,000 sq. ft. or larger (mega)
- Note 3: Excludes high rise, schools, large apartments, etc.

1. Building review			
Building small project defects	defect #	% of total	notes
Accessibility req't, Vol 1-C	62	14.59%	
Doors (1012) ramps (1013) B porch (1014) g'rail (1015)	39	9.18%	
inter wall constr (T704), tenant sep	36	8.47%	
egress width (T1004), exits, stair/door/corr	32	7.53%	
arch/eng seal (GS 83-13) App B	25	5.88%	
total all defects	425		
Building large project defects	defect #	% of total	notes
Accessibility req't, Vol 1-C	94	17.03%	
struct loads (ch16) found (ch18) concr (ch15)	48	8.70%	
arch/eng seal (GS 83-13) App B	42	7.61%	
stair: prot (1006), constr (1007) horiz Ex (1009) disch (1010)	31	5.62%	
light & vent'l (ch12), energy (vol 1, ch13, vol10)	29	5.25%	
total all defects	552		
2. Electrical review			
Electrical small project defects	defect #	% of total	notes
load calculations (110)	91	12.01%	
overcurrent device on branch (210/220/240)	84	11.08%	
disconnects (422,424,430,440,680-12)	55	7.26%	
energy code (401, vol10)	54	7.12%	
overcurrent feeders (220,240)	43	5.67%	
total all defects	758		
Electrical large project defects	defect #	% of total	notes
overcurrent device on branch (210/220/240)	40	9.01%	
load calculations (110)	35	7.88%	
overcurrent feeders (220,240)	30	6.76%	
energy code (401, vol10)	30	6.76%	
fixed elect heat/ac (424/440)	27	6.08%	
total all defects	444		
3. Zoning review			
Zoning small project defects	defect #	% of total	notes
screening	41	15.59%	
buffers	33	12.55%	
letter of compliance	30	11.41%	
dumpster/trash handling with screening	27	10.27%	
parking requirements	22	8.37%	
total all defects	263		
Zoning large project defects	defect #	% of total	notes
screening	62	15.12%	
subdivision plans approved	49	11.95%	
dumpster/trash handling with screening	46	11.22%	
backflow preventor location	44	10.73%	
buffers	43	10.49%	
total all defects	410		

Summary of most common defects**01/21/00**

4. County fire review			
Fire small project defects	defect #	% of total	notes
sprinkler system	6	30.00%	
fire hydrant spacing	5	25.00%	
available water supply	3	15.00%	
fire alarm system	3	15.00%	
total all defects	20		
Fire large project defects	defect #	% of total	notes
private fire main	22	30.99%	
fire department access	11	15.49%	
smoke detection system	11	15.49%	
standpipe system	7	9.86%	
fire hydrant spacing	5	7.04%	
total all defects	71		
5. Mechanical review			
Mechanical small project defects	defect #	% of total	notes
equipment approval	25	15.63%	
ventilation/exhaust system	17	10.63%	
gas piping	17	10.63%	
fan shutdown controls	13	8.13%	
fire/radiation/smoke dampers	12	7.50%	
total all defects	160		
Mechanical large project defects	defect #	% of total	notes
fan shutdown controls	25	11.79%	
ventilation/exhaust system	17	8.02%	
fire/radiation/smoke dampers	17	8.02%	
equipment approval	16	7.55%	
chimney & vents	15	7.08%	
vent termination	15	7.08%	
total all defects	212		
6. Plumbing review			
Plumbing small project defects	defect #	% of total	notes
backflow protector	20	10.36%	
drain pipe installation	18	9.33%	
water heaters/boiler	16	8.29%	
water piping requirements	16	8.29%	
fixture requirements	15	7.77%	
material, tables	15	7.77%	
vent stacks, main vent	15	7.77%	
total all defects	193		
Plumbing large project defects	defect #	% of total	notes
water piping requirements	39	10.29%	
drain pipe installation	35	9.23%	
backflow protector	28	7.39%	
cleanouts, traps	25	6.60%	
water heaters/boiler	25	6.60%	
accessibility requirements	24	6.33%	
total all defects	379		

Discipline	Architectural/ Structure	Electrical	Mechanical	Plumbing	FP (City)	FP (County)	Zoning	Environmental Health	Comments
I. Fire Alarm	N	N	N	N	Y	Y	N	N	CFD - CO Detectors?
II. Sprinklers	N	N	N	N	Y	Y	N	N	
III. Sub Permits									
A. Replacement									
1. Water Heater	N	N	N	N	N	N	N	N	Customer must check "replacement"
2. Furnace	N	N	N	N	N	N	N	N	Customer must check "replacement"
3. Air Conditioning	N	N	N	N	N	N	N	N	Customer must check "replacement"
4. Transformers	N	N	N	N	N	N	N	N	Customer must check "replacement"
5. Meters	N	N	N	N	N	N	N	N	Customer must check "replacement"
6. Ballast Replacement	N	N	N	N	N	N	N	N	Customer must check "replacement"
B. Added Electrical Receptacles	N	Y	N	N	N	N	N	N	Gerald should set cutoff #
C. Added Lighting	N	Y	N	N	N	N	Y	N	Gerald should set cutoff #; Zoning wants to see exterior lighting only
D. Panel Boards	N	Y	N	N	N	N	N	N	Gerald should set cutoff #
E. Utility Connection for CMUD									
1. Well to Water Main	N	N	N	N	N	N	N	N	
2. Septic to City Sewer	N	N	N	N	N	N	N	N	
F. Utility Contractor									
1. From Street To 5' from Building	N	N	N	N	Y	N	N	N	CFD - Fire Mains
2. Sewer	N	N	N	N	N	N	N	N	
3. Water	N	N	N	N	Y	N	N	N	CFD - Fire Mains
G. Hood Replacement	N	N	N	N	Y	N	N	N	CFD - If contains fire extinguisher
H. Grease Trap Permits									
1. Grease Trap Permits - replacement	N	N	N	N	N	N	N	N	Customer must check "replacement"
2. Grease Trap Permits - 1000 gal. plus	N	N	N	N	N	N	N	N	
3. Grease Trap Permits - less than 1000 gal.	N	N	N	Y	N	N	N	N	
I. Equipment Circuits on Industrial	N	Y	N	N	N	N	N	N	
J. Equipment Circuits on Offices	N	N	N	N	N	N	N	N	
K. Duct Extensions or Relocation	N	N	N	N	Y	N	N	N	Must have plans in the field showing rated walls. CFD - cooking or hazardous
L. Diffuser Relocation	N	N	N	N	N	N	N	N	
M. Back Flow Devices	N	N	N	N	Y	N	Y	N	Review by CMUD
N. Electric Gates/Guardhouses	N	N	N	N	Y	Y	Y	N	Verification of restroom within 200 feet
O. Lighted Subdivision Entrances	N	N	N	N	N	N	N	N	
P. Oil/Water Separator	N	N	N	Y	N	N	N	N	If it is a garage, it should be flagged for electrical
Q. Saw Service	N	N	N	N	N	N	N	N	
R. Miscellaneous HVAC (spot cooling)									
S. Miscellaneous Plumbing (bar sinks in offices)									
T. Above and Below Ground Tanks					Y				
IV. Renovations and Upfits									
A. Small Renovations: <2,500 sf. - Exceptions: restaurants, assembly, paint/body shops, dry cleaners, auto garages, or change of use	Y	Y	Y	Y	Y*	Y*	N	N	CFD - if sprinkled or alarmed; CTAC
B. Interior Renovations for B, M, I Use									
1. "Remove a Wall" or Minimal	N	N	N	N	Y	N	N	N	CFD - if sprinklered
2. Reconfiguring a Space (Not Modular)	Y	Y	Y	Y	Y	Y	Y	N	Zoning wants to see parking use
3. Combine or Expand a Space (demising wall)	Y	Y	Y	Y	Y	Y	Y	N	
4. Gut the Building	N	N	N	N	N	N	N	N	
a. Return to Shell	Y	Y	Y	Y	Y	Y	Y	N	
C. Interior Renovations for A, E Use									
1. "Minor" Renovation to Finishes	N	N	N	N	Y	N	N	N	
a: "Minor" Renovation to Seating	Y	N	N	Y	Y	Y	Y	N	
2. Separate Function Areas	Y	Y	Y	Y	Y	Y	Y	N	

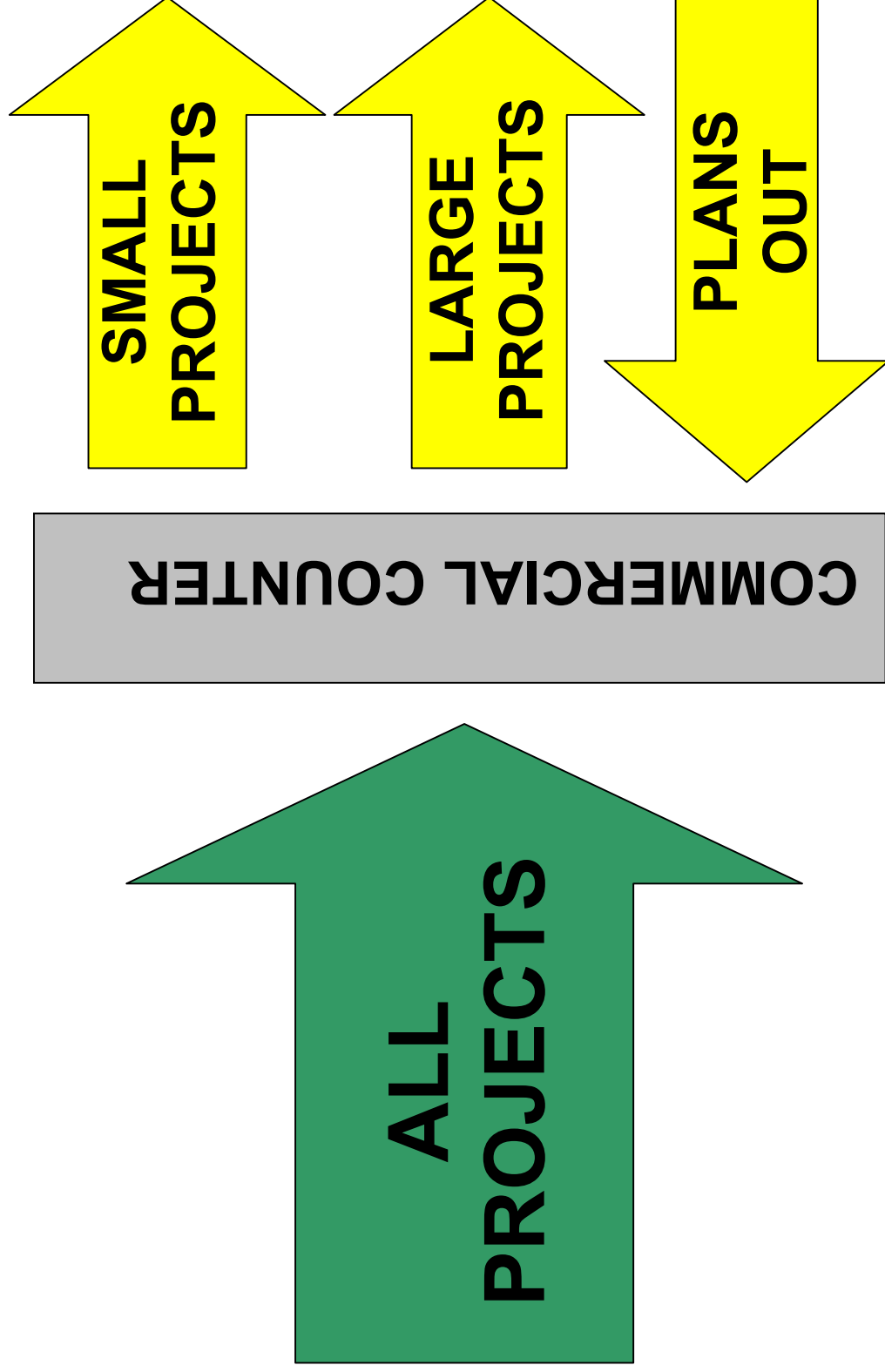
Discipline	Architectural/ Structure	Electrical	Mechanical	Plumbing	FP (City)	FP (County)	Zoning	Environmental Health	Comments
3. Accessibility Modifications	Y	N	N	N	N	N	N	N	
D. Interior Renovations; Industrial Use									
1. Change of Use to a Mix	Y	Y	Y	Y	Y	Y	Y	N	
2. Paint Spray Booth Operation	Y	Y	Y	N	Y	Y	Y	N	
3. Subdividing Space	Y	Y	Y	Y	Y	Y	N	N	
4. Equipment Changes Impacting Multiple Trades	Y	Y	Y	Y	Y	Y	N	N	
E. Modular Furniture Relocations (Cubicles)	N	Y	N	N	N	N	N	N	If walls are wired
F. Zoning Change of Use	N	N	N	N	Y	N	Y	N	City Fire, City Engineering
G. Building Change of Use	Y	Y	Y	Y	Y	Y	Y	N	
H. Renovate Condos									
1. Interior <2,500 sf per single unit	N	N	N	N	Y	Y*	N	N	
2. Interior >2,500 sf per single unit	Y	Y	N	N	Y	Y*	N	N	if CFD
3. Complete Building	Y	Y	Y	Y	Y	Y	N	N	
V. New Construction – Small Projects									
A. Ground Water Remediation	N	Y	N	N	Y	N	Y	Y	Environmental Health requests address
B. Communication Towers - New	N	N	N	N	Y*	Y*	Y	N	CFD - if structures/generators involved
C. Work in Connection with Co-Located Towers	N	N	N	N	N	N	Y	N	
D. Modular Offices	Y*	Y*	N	Y*	Y	Y*	Y*	N	CTAC
E. Modular Classrooms	Y	Y	Y	Y	Y	Y	Y	N	School Team
F. Accessibility									
1. Site; ramps; decks; etc.	Y*	N	N	N	N	N	Y*	N	CTAC
2. Building	Y*	N	N	N	Y	N	N	N	CTAC
G. Canopies – Either applied or free-standing	Y	Y	N	N	Y	Y	Y	N	City Engineering
H. Façade Changes	Y	N	N	N	N	N	Y	N	City Engineering
I. Tents									
1. Under 1000 sf	N	N	N	N	N	N	Y*	Y	Zoning counter
2. Over 1000 sf	Y	Y	Y	Y	Y	Y	Y	Y	CFD - if assembly
J. Small Additions <400 sf.	Y*	Y*	Y*	Y*	Y*	Y*	Y*	N	CTAC
K. Marinas									
1. Marinas	Y	Y	Y	Y	N	Y	Y	N	
2. Piers	Y	N	N	N	N	Y	Y	N	
3. Boat Slips	Y	N	N	N	N	Y	Y	N	
L. Accessory Structures - < 400 sf.	Y*	Y*	Y*	Y*	N	N	Y*	N	CTAC
M. Reroof	N	N	N	N	N	N	N	N	
N. Fire Damage									
1. Structural	Y*	N	N	N	N	N	N	N	CTAC
2. Non-Structural	N	N	N	N	N	N	N	N	
O. Sewage Lift Station	N	Y	N	N	N	N	Y	Y	
P. Parking Lots	N	N	N	N	Y	N	Y	N	
Q. Parks and Recreation									
1. Pedestrian Bridges	N	N	N	N	N	N	Y*	N	CTAC
2. Vehicular Traffic Bridges	N	N	N	N	Y	N	N	N	if access is required to a building
3. Shelters - not an enclosed building	N	N	N	N	N	N	Y*	N	CTAC
4. Bathrooms - <1000 sf.	Y*	N	N	Y*	N	N	Y*	Y	CTAC
5. Pedestrian Walkways	N	N	N	N	N	N	Y*	N	CTAC
R. ATM Machines with enclosure	N	N	N	N	Y	N	Y	N	
S. Golf Courses									
1. Water Sheds (Pump Cover)	N	N	N	N	N	N	Y	N	
2. Guard Sheds	Y	N	N	Y	Y	Y	Y	N	
3. Wells	N	N	N	N	N	N	Y	Y	
4. Pump Houses	N	Y	N	N	Y	N	Y	N	CFD - if pool chemicals are stored
5. Pedestrian Walkways	N	N	N	N	N	N	Y	N	
T. Swimming Pools	N	Y	N	Y	Y	N	Y	Y	
U. Bleachers	N	N	N	N	Y	N	Y	N	
V. Amenities									
1. Tennis Courts	N	N	N	N	N	N	Y	N	
2. Gates at Development Entries	N	N	N	N	Y	Y	Y	N	

Discipline	Architectural/ Structure	Electrical	Mechanical	Plumbing	FP (City)	FP (County)	Zoning	Environmental Health	Comments
3. Ball Fields	N	N	N	N	N	N	Y	N	
4. Dugouts	Y*	N	N	N	N	N	Y	N	CTAC
5. Scorer Sheds	Y*	N	N	N	Y	N	Y	N	CTAC
6. Concession Stands	Y*	N	N	Y*	Y	N	Y	Y	CTAC
7. Restrooms - <1000 sf.	Y*	N	N	Y*	N	N	Y	Y	CTAC
8. Picnic Areas	N	N	N	N	N	N	Y	N	
9. Stables - <1000 sf.	Y*	Y*	N	N	N	N	Y	N	CTAC
W. Christmas Tree Lots	N	N	N	N	N	N	Y*	N	*Zoning Counter
X. Car Washes	Y	Y	Y	Y	Y	Y	Y	N	
Y. Coin Operated Laundry	Y	Y	Y	Y	Y	Y	Y	N	
Z. Home Day Care <6 children	N	N	N	N	N	N	Y*	Y	*Zoning Counter; if >2,500 sf. - RSD
AA. Haunted Houses	Y	Y	Y	Y	Y	Y	Y	N	
BB. Special Events (Amusement)	Y*	Y*	Y*	Y*	Y	Y*	Y*	Y	CTAC
CC. Conversion of Apartments to Condos	N	N	N	N	N	N	N	N	See if tax department will handle instead
DD. Townhouses									
1. Decks	N	N	N	N	N	N	Y*	N	Zoning Counter; CTAC
2. Florida Rooms	Y*	N	N	N	N	N	Y*	N	Zoning Counter; CTAC
3. Renovate Interior <2,500 sf per single unit	N	N	N	N	N	N	N	N	
4. Renovate Interior >2,500 sf per single unit	Y	Y	N	N	N	Y	N	N	RDS
5. Complete Building	Y	Y	Y	Y	Y	Y	N	N	
EE. Interior Prefabricated Modular Offices	Y*	N	Y*	Y*	Y	Y*	N	N	CTAC; if labeled
FF. Racking-Type Storage >12 ft.	Y	N	N	N	Y	Y	N	N	
VI. New Construction – Large									Definition: >\$90,000 in construction cost; >2,500 sf in plumbing; no threshold for electrical or mechanical
A. Shopping Centers	Y	Y	Y	Y	Y	Y	Y	N	
B. High Rises	Y	Y	Y	Y	Y	Y	Y	N	
C. Multiple Building on Single Site	Y	Y	Y	Y	Y	Y	Y	N	
D. Malls	Y	Y	Y	Y	Y	Y	Y	N	
E. Parking Decks									
1. Open	Y	Y	N	Y	Y	Y	Y	N	Fire if over 2 stories
2. Closed	Y	Y	Y	Y	Y	Y	Y	N	Fire if over 2 stories
F. Schools	Y	Y	Y	Y	Y	Y	Y	Y	
G. Medical									
1. Dentists	Y	Y	Y	Y	Y	Y	Y	N	
2. Hospitals	Y	Y	Y	Y	Y	Y	Y	Y	
3. Outpatient	Y	Y	Y	Y	Y	Y	Y	N	
H. Churches	Y	Y	Y	Y	Y	Y	Y	Y	
I. Theaters	Y	Y	Y	Y	Y	Y	Y	N	
J. Shell Buildings									
1. No tenants	Y	N	N	Y	Y	Y	Y	N	Electrical if only conduit
2. With core	Y	Y	Y	Y	Y	Y	Y	N	
K. Big Box Mercantile	Y	Y	Y	Y	Y	Y	Y	N	
L. Nursing Homes/Care Facilities	Y	Y	Y	Y	Y	Y	Y	Y	
M. Jails	Y	Y	Y	Y	Y	Y	Y	Y	
N. Airports	Y	Y	Y	Y	Y	Y	Y	N	
O. Trucking Terminals	Y	Y	Y	Y	Y	Y	Y	N	
P. Stadiums/Arenas	Y	Y	Y	Y	Y	Y	Y	N	
Q. Car Dealers/Auto Sales/Garages	Y	Y	Y	Y	Y	Y	Y	N	
R. Hotels/Motels	Y	Y	Y	Y	Y	Y	Y	Y	
S. Nightclubs	Y	Y	Y	Y	Y	Y	Y	Y	
T. Dormitories	Y	Y	Y	Y	Y	Y	Y	N	
U. Self Storage									
1. Units Only	Y	N	N	N	Y	Y	Y	N	
2. Climate Controlled	Y	Y	Y	Y	Y	Y	Y	N	
V. Funeral Homes	Y	Y	Y	Y	Y	Y	Y	N	
W. Flea Markets									

Discipline	Architectural/ Structure	Electrical	Mechanical	Plumbing	FP (City)	FP (County)	Zoning	Environmental Health	Comments
1. Outdoor	N	N	N	N	N	N	Y	N	
2. Indoor	Y	N	Y	Y	Y	Y	Y	N	
X. Post Office	Y	Y	Y	Y	Y	Y	Y	N	
Y. Wastewater Treatment Plants	Y	Y	Y	Y	Y	Y	Y	Y	
Z. Water Treatment Plants	Y	Y	Y	Y	Y	Y	Y	Y	
AA. Grocery Stores	Y	Y	Y	Y	Y	Y	Y	N	
BB. Health & Fitness	Y	Y	Y	Y	Y	Y	Y	N	
CC. Day Care Centers >6 children	Y	Y	Y	Y	Y	Y	Y	Y	
DD. Gyms, Interior Playgrounds	Y	Y	Y	Y	Y	Y	Y	N	
EE. Skating Rinks	Y	Y	Y	Y	Y	Y	Y	N	
FF. Bowling Alleys	Y	Y	Y	Y	Y	Y	Y	N	
GG. Courthouses	Y	Y	Y	Y	Y	Y	Y	N	
HH. Transportation									
1. Stations	Y	Y	Y	Y	Y	Y	Y	N	
2. Platforms	Y	Y	N	N	Y	N	Y	N	
3. Garages	Y	Y	Y	Y	Y	Y	Y	N	
II. Body Shops	Y	Y	Y	Y	Y	Y	Y	N	
JJ. Dry Cleaning Plants	Y	Y	Y	Y	Y	Y	Y	N	
KK. Restaurants	Y	Y	Y	Y	Y	Y	Y	Y	
LL. Residential									
1. Apartments	Y	Y	Y	Y	Y	Y	Y	N	
2. Townhomes	Y	Y	N	N	Y	Y	Y	N	>2,500 sf go to RDS
3. Condominiums	Y	Y	Y	Y	Y	Y	Y	N	
MM Group Homes									
1. >6	Y	Y	Y	Y	Y	Y	Y	Y	
2. <=6	Y	Y	Y	Y	N	Y	Y	N	*Zoning Counter

How It Worked in the Past

“One Size Fits All”



How It Will Work

